

# **Cadastral Technical Working Group**

Idaho Geospatial Committee

Meeting Summary - Friday, October 26, 2001

This meeting was more or less a continuation of the previous meeting held Friday, September 28, 2001. The focus was to develop an immediate action plan that could begin without (significant) funding requirements. Also, at the direction of the IGC, Cindy Lou McDonald presented and discussed the State Tax Commission's internal GIS Integration proposal, for the purpose of having the Cadastral TWG provide a comment/review/approval to the IGC, for their consideration and comment to ITRMC, for funding recommendation to JFAC (or something like that).

## **Immediate Collection of Survey Data:**

Under discussion, it was generally accepted that the most valuable contribution to PLSS data and/or model development is GPS coordinates for monumented/recovered government corners.

The best way to get this information, existing and future, is to enlist the involvement and support of the Idaho Surveyors Association, and develop a procedure (including standards, metadata, an internet retrievable database, and internet based data submittal tools) by which cooperating/partner surveyors could submit data.

The initial draft State Cadastral Plan did identify this collection and inventory phase, as well as database development, as a funded item. However, garnering support and involvement first on a volunteer/pilot basis has a lot of merit (and, we don't have specific program funding at this time!). We realize that this will be a long-range program, but it is important to get started, and to have it develop under the direction of the surveyors. Several agencies indicated they have internet drive space available and could provide limited assistance to such a pilot project.

Jack Clark, current Board member and editor of the "Gem State Surveyor", was asked to take this proposal to the Surveyor Assoc. Board for their consideration and action. It was noted that Rich Jensen, president elect of the organization, will be taking the GCDB instruction offered by BLM in early December, and that he has been very interested in GCDB issues as they have progressed over the past years. It was suggested that we verify that Rich receive invitations to the Cadastral TWG meetings (I finally got him on the email list!).

Tom Spencer indicated that a similar program pilot was starting up in Colorado, and that Jack Etal. may want to research that project for ideas.

## **Cadastral (Parcel) Model Development:**

A second item that could proceed without significant investment could be the development of a set of minimal GIS standards for assessment parcel-mapping. Considerations include meeting immediate short-range needs of many agencies for a statewide parcel layer (see also State Tax proposal), integration with longer range GCDB development, and long range FGDC standards compliance and Arc Parcel model integration.

The concept was discussed that standards would apply to a uniform statewide parcel data set, whereby differing county parcel data configurations could be "normalized" to achieve consistency with respect to parcel representation and attribution. Spatial alignment would be best achieved by "adjusting" section maps to a common GCDB calculation.

This concept is basically the IDL / Bonner County program extended to the other 44 counties (or as Bob Smith puts it – "44 AMLs"). The minimal standards then, consist primarily of having counties incorporate data set components that facilitate the periodic automation of converting digital county parcel maps into a statewide parcel coverage. The three physical components (on the county preparation side) would appear to be 1) GCDB ID corner points (for section and ¼ corners) for adjustment registration points, 2) closed polyline parcel features for converting to polygon topology, and 3) parcel text for automating subsequent polygon attribution and table joining. Many counties are already doing components 2 and 3 now.

Although the county prep side of things is quite basic under this initial format, it will be important for a technical committee to prepare a more comprehensive working model for demonstrating how longer range goals will be facilitated without sacrificing this initial investment. In other words, when the Arc Parcel model is "perfected", and more accurate GCDB has been calculated, how could the counties take their existing parcel maps and convert them into some geodatabase format (that includes FGDC attribution requirements and "vertical integration" with other data sets).

I think this is very possible to do with the information we have now.

I would propose:

- 1) We get State Tax, Bob Smith – IDL (probably the only guy that actually understands the geodatabase parcel stuff!!!) and a couple other techies together to build a demonstration pilot of how to take a set of county parcel maps (with the 3 components identified above) and merge them into a (GCDB edge-matched) parcel polygon township coverage. This part isn't hard, Bob has already done this for Bonner County (as I understand it). The difference would be that the counties would continue to map on a section by section basis, and this conversion would be done periodically (annually?).

We test the procedures, demonstrate the "model", write up the procedures to add the 3 components, and then State Tax teaches the process at Summer/Winter school to parcel mappers for immediate implementation.

- 2) State Tax, or Lands (see Tax Commission proposal) warehouses the normalized data.
- 3) The tech sub-committee then looks at how to convert the resulting coverage into a workable geodatabase model that supports Arc Parcel construction, and includes the FGDC attributes. Analyze how to auto attribute a portion of the FGDC attributes via owner/legal-description info from a table link, and probably call it good at a conversion level.
- 4) The tech sub-committee then looks at an application to do deed/plat/survey processing as a maintenance function which more completely fills in the FGDC attribute scheme (a GenTax VB module??).
- 5) We test the procedures, demo the "model", and then State Tax teaches the process at Summer/Winter school to parcel mappers. Counties could weigh the benefits of maintenance based on staffing, expertise, etc.

I realize we didn't discuss all of this at the meeting, some of this was at lunch later, in my dreams, etc.

### **State Tax – GIS Integration Proposal:**

Cindy Lou McDonald (GIS Manager, Idaho State Tax Commission) was approached by the State Tax Commissioners to address the issue of how GIS could be used throughout the Commission. Tax's ability to conduct statewide analysis is hampered. Data cannot be tracked any finer than the ZIP code level. In addition, it is not possible to locate businesses or people affected by a city boundary, an urban renewal area, an Indian reservation, an enterprise zone, or a tax code area. That data is critical for Tax to be able to link existing databases together in order to perform analyses. The counties have already invested millions of dollars and thousands of hours over the last ten years building digital maps and data sets. Tax is proposing a partnership using the Internet and/or an intranet, and in cooperation with other state agencies, would be able to warehouse cadastral and private parcel data for use by the counties, and by state agencies for internal purposes.

The proposal as presented is approximately \$5 million over 5 years. Many of the details involve programming costs and time frames for development of internal applications, to be used by the Tax Commission for utilizing GIS and County data for audit and reporting purposes. The key components that integrate with the proposed State Cadastral Plan are: 1) the development of mapping standards and procedures consistent with NILES and FGDC, 2) building and/or coordinating the conversion-maintenance of parcel data based on those standards, 3) funding the collection/coordination of GCDB/GPS control for section corners, at approximately \$100,000 per year for 5 years, and 4) supporting the recalculation of the GCDB to upgrade accuracy, based on inventoried/collected GPS coordinates.

The proposed program can be a great start toward the implementation of the proposed plan, and it was well received by the group. Cindy Lou has been requested to provide an "embellished" copy of the proposal to the committee so that the proposal can be integrated/written into the I-Team Cadastral Plan format, which can be submitted to the IGC along with a letter of support from the committee. Hopefully in time for IGUM!!!